

**COMMONWEALTH OF VIRGINIA**  
**Department of Environmental Quality**  
**Valley Regional Office**

**STATEMENT OF LEGAL AND FACTUAL BASIS**  
**Significant Permit Modification**

R. R. Donnelley & Sons Company  
Harrisonburg, Virginia  
Permit No. VRO81000  
Effective Date: March 15, 2006  
Expiration Date: March 14, 2011

As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, R. R. Donnelley & Sons Company has applied for a significant permit modification to the Title V Operating Permit for its Harrisonburg book printing facility. The Department has reviewed the application and has prepared a modified Title V Operating Permit.

Engineer/Permit Contact: \_\_\_\_\_ Date: \_\_\_\_\_

Air Permit Manager: \_\_\_\_\_ Date: \_\_\_\_\_

Deputy Regional Director: \_\_\_\_\_ Date: \_\_\_\_\_

## REQUESTED MODIFICATION

The Valley Regional Office of the Department of Environmental Quality (DEQ) received a request from RR Donnelley & Sons Company (RR Donnelley) on March 22, 2007, including supplemental information received on April 23, 2007, for changes to its Title V operating permit. RR Donnelley has requested that the permit be modified to incorporate the changes to its minor NSR permit, which was amended on February 23, 2007. The proposed changes to RR Donnelley's Title V operating permit are considered a significant modification to the permit, as defined in 9 VAC 5-80-230.

## REASON FOR MODIFICATION

On April 28, 2006, RR Donnelley's minor NSR permit was amended to allow for modifications to Press 764. Because of the modifications, Press 764 was renamed Press 782. The following changes were made to the minor NSR permit (the condition numbers refer to the permit dated February 15, 2005, as amended August 11, 2005 and April 28, 2006):

- References to Press 764 throughout the permit were removed and replaced by references to Press 782 to reflect RRD's requested redesignation.
- Condition 15: The visible emissions evaluation for Press 790 was removed because the testing had been completed.
- Condition 19: The initial notification was updated to address the proposed modification of Press 764 instead of Press 790. Notification requirements for Press 790 had been fulfilled.

In addition, on February 23, 2007, RR Donnelley's minor NSR permit was again amended to include the addition of Press 791, the removal of Press 762, Press 763, and Press 786, and the installation of a regenerative thermal oxidizer (RTO) to control volatile organic compound (VOC) emissions from Press 770 and Press 772. As a result, the following changes were made to the minor NSR permit (the condition numbers refer to the permit dated February 15, 2005, as amended August 11, 2005, April 28, 2006, and February 23, 2007, unless otherwise noted):

- Condition 1: Presses 762, 763, and 786 were removed from the equipment list. Press 791 was added to the equipment list.
- Conditions 2, 3, 12, 14, 17, 19, 23, and 24: References to Presses 762, 763, and 786 were removed. References to Press 791 were added. Press 791 is required to have the same restrictions as the other heatset printing presses under the 75.0 tpy (now 69.5 tpy) limit, including a maximum VOC content level for inks of 32% (calculated as a monthly average), a limit on VOC content in fountain solutions (daily average of five percent by weight) and a limit on the maximum vapor pressure of VOC in cleaning solvents. Press 791 was grouped with Presses 765-766, 770-773, 782, 784-785, 787, and 790 under the same throughput limits and emission limit.

- Condition 14: The throughput limits for the grouped heatset presses were adjusted to correspond to the lowered emissions limit and to include both automatic and manual blanket wash (It was DEQ's understanding that RRD was using only manual blanket wash. However, Press 790 uses automatic blanket wash, as will Press 791.). Also, a note was added that, upon installation of the RTO, the throughput limits will be replaced by a formula-based throughput limit for the grouped heatset presses. The formula-based throughput limit was added to the permit.
- Condition 17: The emission limit for the group of heatset printing presses was reduced to 69.5 tpy from 75.0 tpy.
- Condition 19: The heatset presses that will be controlled by the RTO (Presses 770 and 772) were separated from the rest of the heatset presses. Before the RTO is installed, the presses are limited to a 10% opacity limit. After the RTO is installed, Presses 770 and 772 are limited to a 5% opacity limit.
- Condition 24: Several recordkeeping requirements were modified or added. Once the RTO is installed, RRD will be required to keep separate VOC monthly material balance records on Presses 770 and 772 (combined), since these presses will be controlled by the RTO. RRD will need to determine their maximum throughput of VOC in inks, fountain solutions and cleaning solvents monthly using a formula provided in the permit. In addition, RRD will need to track natural gas and propane usage in the RTO as well as keep operation and monitoring records on the RTO. RRD will need to keep results of all stack tests and visible emissions evaluations (VEEs) and records on all scheduled and unscheduled maintenance and operator training.
- Condition 26: Condition 26a, the initial notification requirement for the date on which modification of Press 782 (formerly Press 764) begins, was removed. Condition 26b, the notification requirement for the actual start-up date of Press 782, was also removed. Initial notifications for the start of construction and start-up dates of Press 791 and the RTO were added to the permit. Notifications on the anticipated date of the performance tests and VEEs were also included.

The following conditions were added to the minor NSR permit:

- Condition 5: Once the RTO has been installed, it will be required to operate when either Press 770 or Press 772 is operating.
- Condition 8: The RTO will need to maintain a control efficiency of at least 95.0%.
- Condition 9: The RTO will need to maintain a minimum combustion chamber temperature of equal to or greater than that determined during performance testing and a retention time of at least 0.80 seconds.

- Condition 10: The RTO will be required to have a device to continuously measure and record the combustion chamber temperature.
- Condition 13: The approved fuels for the RTO will be natural gas and propane.
- Condition 15: The maximum throughput of VOC after installation of the RTO will be calculated by RRD monthly using the formula provided in this condition.
- Condition 20: A stack test on the RTO will be required to show the RTO can meet a destruction efficiency of 95.0%.
- Condition 21: A VEE on Presses 770 and 772 will be required after the RTO is installed to ensure the presses are meeting the 5% opacity limit.
- Condition 22: A VEE on Press 791 will be required after it is installed to ensure it meets the 10% opacity limit.
- Condition 27: The portion of the permit to install Press 791 will become invalid if the equipment is not installed within 18 months of the date the permit is issued. (Note: this condition will not be incorporated into the Title V permit since installation of Press 791 has already begun.)

The following conditions were deleted from the minor NSR permit (condition number refers to the permit dated February 15, 2005, as amended August 11, 2005, and April 28, 2006):

- Condition 19: Since Press 782 (formerly Press 764) has been installed, this condition was removed.

A copy of the minor NSR permit is included as Attachment A. Due to the issuance of this amended minor NSR permit, the Title V permit should be modified to include the changes to the applicable requirements.

In addition, RR Donnelley indicated that the name of the facility changed from RR Donnelley & Sons Company – Harrisonburg Division to RR Donnelley & Sons Company – Harrisonburg Manufacturing North. Also, the name of the facility's responsible official has changed. As a result, the facility name and responsible official's name will be changed in the Title V permit.

#### **APPLICABILITY OF 9 VAC 5-80-230**

Significant permit modification procedures shall be used for those permit modifications that:

1. *Involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit, such as a change to the method of monitoring to be*

*used, a change to the method of demonstrating compliance, or a relaxation of reporting or recordkeeping requirements.*

The addition of Press 791 and the RTO require additional monitoring, reporting, and recordkeeping requirements in the permit.

2. *Require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis.*

The emission limitation for the group of heatset presses (defined in the NSR permit dated February 15, 2005, as amended August 11, 2005, April 28, 2006, and February 23, 2007 as Presses 765-766, 770-773, 782, 784-785, 787, 790, and 791, since Press 791 has replaced Presses 762, 763, and 786) decreased from 75.0 tpy to 69.5 tpy. This change needs to be incorporated into the Title V operating permit.

3. *Seek to establish or change a permit term or condition for which there is no corresponding underlying applicable federal requirement and that the source has assumed to avoid an applicable federal requirement to which the source would otherwise be subject. Such terms and conditions include:*
  - a. *A federally enforceable emissions cap assumed to avoid classification as a Title I modification; and*
  - b. *An alternative emissions limit approved pursuant to regulations promulgated under §112(i)(5) of the federal Clean Air Act.*

RR Donnelley does not have such limits in its Title V operating permit, so this item is not applicable.

The proposed changes meet the regulatory criteria for a Title V significant modification, so the significant permit modification procedures as defined in 9 VAC 5-80-230 apply.

## **CHANGES TO TITLE V OPERATING PERMIT**

Changes to the Title V operating permit resulting from the modification request are as follows.

Throughout the permit, references to Presses 762, 763, 764, and 786 were removed. References to Presses 782 and 791 were added (Presses 782 and 791 have been permitted with the large group of heatset presses). Note that the modifications to Press 764 that resulted in the redesignation of Press 764 to Press 782 included a change in the print units. The old print unit, a 1991 Hantscho 16C unit was replaced by a 1985 Harris M110 unit. This change has been incorporated into the Title V permit.

References to applicable regulations and NSR permit conditions have been updated throughout the Title V permit.

References to the ‘February 15, 2005 permit, as amended August 11, 2005’ have been updated to ‘February 15, 2005 permit, as amended August 11, 2005, April 28, 2006 and February 23, 2007’.

The facility name has changed from RR Donnelley & Sons Company – Harrisonburg Division to RR Donnelley & Sons Company – Harrisonburg Manufacturing North. RR Donnelley’s minor NSR permit dated February 15, 2005, as amended August 11, 2005, April 28, 2006 and February 23, 2007 also needs to be amended to reflect the name change. The administrative amendment to change the name is being processed as a separate, concurrent permit action.

The responsible official has been changed from Don Hensley to Gary Calleo.

## **Section II – Emission Units**

Section II, Table I: Presses 762, 763, 764, and 786 were removed. Presses 782 and 791 were added. The RTO was added as control equipment for Presses 770 and 772. The applicable permit date was updated for all units.

## **Section III - Sheet-fed Offset Printing Press – Emission Unit 751**

Condition III.B.4: Records on the results of all stack tests and visible emissions evaluations as well as scheduled and unscheduled maintenance, and operator training were added.

Condition III.C.1: The language in this condition was updated to match Condition 25 of the minor NSR permit.

## **Section IV - Web Offset Printing Presses - Emission Units 765-773, 782-785, 787, 790, and 791**

Condition IV.A.2: This condition was added to limit opacity from presses 770 and 772 to 10% before installation of the RTO and to 5% after installation of the RTO, per Condition 19 of the minor NSR permit.

Condition IV.A.6: This condition was added to require Presses 770 and 772 to be controlled by an RTO once the RTO has been installed, per Condition 5 of the minor NSR permit.

Condition IV.A.8: This condition was added to require the RTO to maintain a destruction efficiency for VOC emissions of 95.0% on a mass basis, per Condition 8 of the minor NSR permit.

Condition IV.A.9: This condition was added to require the RTO to maintain a minimum combustion chamber temperature equal to or higher than that determined during the performance testing and a retention time of at least 0.80 seconds, per Condition 9 of the minor NSR permit.

Condition IV.A.10: This condition was modified to limit the ink VOC throughput in Presses 765-766, 770-773, 782, 784-785, 787, 790, and 791 to 72.3 tpy instead of 78.0 tpy prior to the

installation of the RTO. The fountain solution VOC throughput limit was reduced from 8.9 tpy to 8.3 tpy for this same group of heatset presses. Also for this same group of presses, the throughput of blanket wash was divided between automatic blanket wash (1.0 tpy) and manual blanket wash (4.72 tpy). These changes were made to reflect Condition 14 of the minor NSR permit.

Condition IV.A.11: – This condition was added to limit the maximum throughput of VOC after installation of the RTO through the formula provided, per Condition 15 of the minor NSR permit.

Condition IV.A.12: This condition was modified to limit VOC emissions from the group of heatset presses (Presses 765-766, 770-773, 782, 784-785, 787, 790, and 791) to 69.5 tpy, per Condition 17 of the minor NSR permit. This group of presses was currently limited to 75.0 tpy.

Condition IV.A.14: This condition was added to limit the approved fuels for the RTO to natural gas and propane, per Condition 13 of the minor NSR permit.

Condition IV.B.1: This condition was modified to reflect the current stack numbers. Stacks 62, 63, 64, and 86 were removed and Stacks 82 and 91 were added.

Condition IV.B.2: This condition was modified to incorporate controlled emissions in addition to the uncontrolled emissions.

Condition IV.B.6: This condition was added to ensure the RTO was equipped with devices to continuously measure and record the combustion chamber temperatures, per Condition 10 of the minor NSR permit.

Condition IV.B.7: This condition was modified to incorporate Condition 24 of the minor NSR permit. Parts b, c, i, j, and n were added to the recordkeeping requirements. Part e was modified to clarify that the information was required for both manual and automatic blanket wash. Part m was modified to include the stack test results in addition to the visible emissions evaluations.

Condition IV.B.8: This condition was added to ensure that the facility would maintain records of any bypass, malfunction, shutdown or failure of the facility or of any air pollution control equipment that results in excess air emission for more than one hour, per Condition 31 of the minor NSR permit.

Condition IV.C.1: This condition was added to require initial performance tests for VOC from the RTO serving Presses 770 and 772, per Condition 20 of the minor NSR permit.

Condition IV.C.2: This condition was added to require visible emissions evaluations on Presses 770 and 772 upon completion of the RTO, per Condition 21 of the minor NSR permit.

Condition IV.C.3: This condition was added to require visible emissions evaluations on Press 791, per Condition 22 of the minor NSR permit.

Condition IV.C.5: The language in this condition was updated to match Condition 25 of the minor NSR permit.

Section D: This section was added to the Title V operating permit.

Condition IV.D.1: Written notifications for Press 791 and the RTO are required per Condition 26 of the minor NSR permit. Note that the minor NSR condition requiring notification for the actual date on which construction of Press 791 commenced was not added to the Title V permit because this condition has already been fulfilled.

Condition IV.D.2: This condition was added to require the facility to report malfunctions, including malfunctions relating to air pollution control equipment, that cause excess emissions for more than one hour, per Condition 32 of the minor NSR permit.

**Section V - Paper and Dust Handling Systems – Emission Units Pneumatic Trim Scrap (PTS) System and Waste Paper Dust (WPD) Collection System**

Condition V.B.6: Records on all stack test results and visible emissions evaluations as well as scheduled and unscheduled maintenance, and operator training were added.

Condition V.C.1: The language in this condition was updated to match Condition 25 of the minor NSR permit.

**Section VI - Adhesive Operations - Emission Unit ADH**

Condition VI.B.2: Records on all stack test results and visible emissions evaluations as well as scheduled and unscheduled maintenance, and operator training were added.

Condition VI.C.1: The language in this condition was updated to match Condition 25 of the minor NSR permit.

The boilerplate language in all ‘Testing’ Sections has been modified to reflect the new boilerplate language.

Inapplicable Requirements Rule 4-45, Emission Standards for Lithographic Printing Processes, has been changed to Rule 4-53 since Rule 4-45 was renumbered to 4-53.

Inapplicable Requirements Subpart Kb has been modified to clarify that all storage tanks at RR Donnelley have capacities below 75 m<sup>3</sup> (instead of below 19,812.9 gallons) to more accurately reflect Subpart Kb.

General Conditions C and J have been modified to reflect the new boilerplate language.

**INAPPLICABLE REQUIREMENTS**

The permittee identified several inapplicable requirements in the permit application: 9 VAC 5-40 Article 31 – Emission Standards for Paper and Fabric Coating Application Systems, 9 VAC 5-40



Article 36 – Emission Standards for Flexographic, Packaging, Rotogravure, and Publication Rotogravure Printing Lines, 9 VAC 5-40 Article 53 – Emission Standards for Lithographic Printing Processes, and 40 CFR 63 Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters. All of these have already been included in the Title V permit with the exception of 9 VAC 5-40 Article 53 and 40 CFR 63, Subpart DDDDD. 9 VAC 5-40 Article 53 was previously numbered Article 45. Article 45 was already listed as an inapplicable requirement in the permit. Thus, the reference to Article 45 was changed to Article 53. It was previously determined by DEQ that 40 CFR 63, Subpart DDDDD does apply to RR Donnelley (see the Statement of Basis dated March 15, 2006); however, there are no requirements applicable to RR Donnelley derived from the rule. Consequently, 40 CFR 63, Subpart DDDDD has not been added as an inapplicable requirement.

### **COMPLIANCE ASSURANCE MONITORING (CAM) APPLICABILITY**

The potential pre-control device emissions from Presses 770 and 772 (the two presses that will be controlled by the RTO) (combined) are as follows: 29.14 tpy VOCs and 4.92 tpy HAPs. Since the pre-control VOC emissions are below 100 tpy, individual HAP emissions are less than 10 tpy, and total HAP emissions are less than 25 tpy, CAM is not applicable.

A CAM plan has already been included in the Title V permit for the pneumatic trim scrap system and waste paper dust collection system. No changes were made to this existing CAM plan.

### **PUBLIC PARTICIPATION**

The public participation requirements of 9 VAC 5-80-270 apply to significant permit modifications. Accordingly, a 30-day public comment period was announced in Harrisonburg's Daily News Record on June 8, 2007. The public comment period begins on June 9, 2007 and expires on July 9, 2007.

Under 9 VAC 5-80-230 and 290, affected states and EPA shall be notified. A notification letter was sent to West Virginia, the only affected state, on June 8, 2007. The proposed modified permit was provided to EPA on June 8, 2007. EPA's 45-day review period ends on July 24, 2007.

### **ATTACHMENTS**

Attachment A – February 15, 2005 Minor NSR Permit, as amended August 11, 2005, April 28, 2006, and February 23, 2007

**COMMONWEALTH OF VIRGINIA**  
**Department of Environmental Quality**  
**Valley Regional Office**

**STATEMENT OF LEGAL AND FACTUAL BASIS**

R. R. Donnelley & Sons Company  
Harrisonburg, Virginia  
Permit No. VRO81000

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, R. R. Donnelley & Sons Company has applied for a renewal of its Title V Operating Permit for its Harrisonburg book printing facility. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Engineer/Permit Contact:\_\_\_\_\_

Date: \_\_2-22-06\_\_

Air Permit Manager:\_\_\_\_\_

Date: \_\_2-23-06\_\_

Deputy Regional Director:\_\_\_\_\_

Date: \_\_3-7-06\_\_

## **FACILITY INFORMATION**

### Permittee

R. R. Donnelley & Sons Company  
2347 Kratzer Road  
Harrisonburg, Virginia 22802-8303

### Facility

R. R. Donnelley & Sons Company  
2347 Kratzer Road  
Harrisonburg, Virginia 22802-8303

Plant ID No. 51-165-0114

## **SOURCE DESCRIPTION**

### NAICS Codes:

323117 (formerly SIC Code: 2732) – Book printing

R. R. Donnelley & Sons Company (RRD) produces hard- and soft-cover commercial trade books using offset lithographic printing. The facility operates 18 heatset web presses, one sheetfed (coldset) press, and binding processes. Press operations use inks, fountain solutions, and blanket wash (cleaning solvents). In the binding area, printed materials are assembled, bound into book blocks, and then further processed into hard- and soft-cover books. Edge trimming and roughing and adhesive application are conducted at the binding lines. Volatile organic compound (VOC) emissions result primarily from evaporation of solvent in the inks, fountain solutions, and cleaning solvents. Particulate emissions are generated by the handling of paper trim and dust generated at the binding lines. Adhesive application at the binding lines is an additional source of VOC emissions.

The facility is a Title V major source of VOC and HAPs (glycol ethers, naphthalene, and ethylene glycol, all three of which are also VOCs). This source is located in an attainment area for all pollutants, and is a PSD minor source. The facility was previously permitted under a Minor NSR Permit issued on February 15, 2005 and amended August 11, 2005.

## **COMPLIANCE STATUS**

The facility is inspected at least once every two years. The most recent full compliance inspection of the facility was conducted on July 28, 2004. RRD was found to be operating in compliance during the inspection. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. Based on

these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable requirements.

### CHANGES SINCE INITIAL PERMIT

During its five-year term, RRD's Title V permit was modified three times to reflect changes at the facility, as detailed below.

Date	Permit action	Reason for action
March 15, 2001	Issuance	N/A
November 29, 2001	Minor modification	<ul style="list-style-type: none"><li>- installed additional cyclone in Paper Trim Scrap (PTS) system</li><li>- installed additional baghouse in Waste Paper Dust (WPD) system</li><li>- no change in allowable throughput or emissions</li></ul>
October 13, 2004	Significant modification	<ul style="list-style-type: none"><li>- installation of three heatset web presses (768, 769, &amp; 783)</li><li>- removal of Edge Stainer</li><li>- removal of state-only enforceable toxic compound emission limits (no longer applicable to lithographic printing facilities)</li></ul>
December 12, 2005	Significant modification	<ul style="list-style-type: none"><li>- installation of heatset press (790)</li><li>- reduction in allowable heatset printing emissions (limit changed from 95 tpy to 75 tpy)</li><li>- reflected the combining of two mNSR permits into a single permit</li></ul>

Please refer to the statement of basis documents for each of the listed modifications for further details. The renewed Title V permit reflects the modifications as well as the addition of a Compliance Assurance Monitoring (CAM) Plan for the baghouses on the Waste Paper Dust (WPD) collection system. Also, the Inapplicable Requirements section of the permit has been expanded to include some federal regulations that have been promulgated since issuance of the original permit.

## EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

*Table I. Emission Units - R. R. Donnelley & Sons - Harrisonburg Division*

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
<b>Sheetfed Offset Printing Equipment</b>							
751	51A, B, and C	1989 Heidelberg 72FL sheetfed offset printing press	11,000 imp/hr	none	-	-	2/15/05, as amended 8/11/05
<b>Web Offset Printing Equipment</b>							
762	62	1980 Hantscho VI two-web offset printing press	861 ft/min	none	-	-	2/15/05, as amended 8/11/05
763	63	1980 Hantscho VI two-web offset printing press	861 ft/min	none	-	-	2/15/05, as amended 8/11/05
764	64	1991 Hantscho 16C two-web offset printing press	861 ft/min	none	-	-	2/15/05, as amended 8/11/05
765	65	1995 Toshiba OA two-web offset printing press	861 ft/min	none	-	-	2/15/05, as amended 8/11/05

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
766	66	1996 Toshiba OA two-web offset printing press	861 ft/min	none	-	-	2/15/05, as amended 8/11/05
767	67	2000 Hantscho 16c two-web offset printing press	38,000 units/hr	none	-	-	2/15/05, as amended 8/11/05
768	68	2003 Hantscho 16c two-web offset printing press	38,000 units/hr	none	-	-	2/15/05, as amended 8/11/05
769	69	2003 Hantscho 16c two-web offset printing press	38,000 units/hr	none	-	-	2/15/05, as amended 8/11/05
770	70	1985 Toshiba OA two-web offset printing press	1,615 ft/min	none	-	-	2/15/05, as amended 8/11/05
771	71	1985 Toshiba OA one-web offset printing press	1,615 ft/min	none	-	-	2/15/05, as amended 8/11/05
772	72	1989 Toshiba OA two-web offset printing press	1,615 ft/min	none	-	-	2/15/05, as amended 8/11/05

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
773	73	1994 Toshiba OA two-web offset printing press	1,615 ft/min	none	-	-	2/15/05, as amended 8/11/05
783	83	2003 Harris M110B two-web offset printing press	36,000 units/hr	none	-	-	2/15/05, as amended 8/11/05
784	84	1993 Harris M110B two-web offset printing press	863 ft/min	none	-	-	2/15/05, as amended 8/11/05
785	85	1992 Harris M110B two-web offset printing press	863 ft/min	none	-	-	2/15/05, as amended 8/11/05
786	86	1980 Harris M110B two-web offset printing press	863 ft/min	none	-	-	2/15/05, as amended 8/11/05
787	87	1983 Harris M110B two-web offset printing press	863 ft/min	none	-	-	2/15/05, as amended 8/11/05

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
790	90	Timson T48A one-web offset printing press	31,400 impressions/hr	none	-	-	2/15/05, as amended 8/11/05
<b>Paper and Dust Handling Systems</b>							
PTS	C1, C2, C3, C4	Pneumatic trim scrap system (C1 – C3, 1980; C4, 2001)	15 tons/hr	none	-	-	2/15/05, as amended 8/11/05
WPD	BH1 BH2	Waste paper dust collection system (BH1, 1980; BH2, 2001)	15 tons/hr	Baghouse	BH	TSP, PM-10	2/15/05, as amended 8/11/05
<b>Adhesive Operations</b>							
ADH	-	Binding line adhesive application (1980)	-	none	-	-	2/15/05, as amended 8/11/05

\*The Size/Rated capacity is provided for informational purposes only and is not an applicable requirement.



## EMISSIONS INVENTORY

A copy of the 2004 annual emission update is attached as Attachment A. Emissions are summarized in the following tables.

*Table 2. 2004 Actual Emissions*

Emission Unit	Criteria Pollutant Emission in Tons/Year				
	VOC	CO	SO <sub>2</sub>	PM <sub>10</sub>	NO <sub>x</sub>
Sheetfed press (751)	6.00	0	0	0	0
Heatset web presses (762-773, 783-787, and 790)	62.9	0	0	0	0
Paper and dust handling systems (PTS & WPD)	0	0	0	12.70	0
Adhesive operations (ADH)	1.3	0	0	0	0
Space heat boilers (insignificant emissions units)	0.044	0.68	0.0048	0.0608	0.80
<b>Total</b>	<b>70.24</b>	<b>0.68</b>	<b>0.0048</b>	<b>12.76</b>	<b>0.80</b>

*Table 3. 2004 Facility Hazardous Air Pollutant Emissions*

Pollutant	Hazardous Air Pollutant Emission in Tons/Year
Glycol ethers	0.5
Ethylene glycol (CAS 107-21-1)	0.75
Naphthalene (CAS 91-20-3)	0.25
<b>TOTAL HAPS</b>	<b>1.5</b>

Note: Combustion emissions of naphthalene, arsenic, chromium, cobalt, manganese, nickel, and lead were below one pound per year.

## **SHEETFED PRESS APPLICABLE REQUIREMENTS – Unit 751**

### **Limitations**

The following VOC limitations, applicable to the sheetfed (nonheatset) press, are State BACT requirements from the minor NSR permit issued February 15, 2005 and amended August 11, 2005. Condition numbers are from the minor NSR permit; a copy of the permit is attached as Attachment B.

- Condition 6, limiting the VOC composite partial vapor pressure of organic cleaning solvents to 10 mmHg at 20 °C and requiring that organic cleaning solvents, including those retained in used towels, be stored in a closed container when not in use
- Condition 10, limiting throughput of VOC in inks and fountain solutions to 17.1 tons per year and throughput of VOC in cleaning solvents to 7.9 tons/yr, each calculated monthly as the sum of the previous consecutive 12-month period
- Condition 12, limiting VOC emissions from the sheetfed press to 21.0 tons/yr, calculated monthly as the sum of the previous consecutive 12-month period
- Condition 14, limiting visible emissions to five percent opacity

### **Monitoring and Recordkeeping**

The monitoring and recordkeeping requirements in Condition 17 of the minor NSR permit have been modified to meet Part 70 requirements. The permittee is required to monitor and record on a monthly basis the throughput of VOC (in inks, fountain solutions, and cleaning solvents) to the sheetfed press. The permit also requires that monthly and annual VOC emissions from the sheetfed press be calculated each month to demonstrate compliance with VOC emissions limits. Material Safety Data Sheets (MSDS) for all materials used are required to be maintained on site. The following assumptions, from EPA's draft Control Techniques Guidelines (CTG) for Control of VOC from Offset Lithographic Printing (EPA-453/D-95-001, September 1993) shall be used in calculating VOC emissions:

- 95% of nonheatset ink VOC is retained in paper substrate (5% emitted)
- 100% of fountain solution VOC is emitted
- 50% of cleaning solvent applied is emitted (50% retained in used towels kept in closed containers)

Considering that the sheetfed press is operated at ambient temperature and that the inks employed are of low VOC content (primarily ultraviolet-cured inks are used), operation of the sheetfed press is not expected to result in visible emissions. Accordingly, no monitoring has been included in the permit for the visible emissions limit on the sheetfed press.

The permit includes requirements to maintain records of all monitoring and testing required by the permit. Such records include VOC emission calculations and supporting VOC throughput and material formulation records. Condition III.B.1 requires that calculation of VOC emissions be made using the following formula:

$$E_{VOC} = \sum_{i=1}^n [(I_{VOC,i} \times 0.05) + FS_{VOC,i} + (BW_{VOC,i} \times 0.50)]$$

Where

- $E_{VOC}$  = VOC emissions in tons per month
- $I_{voc}$  = Monthly throughput of VOC contained in ink, as applied (tons)
- $FS_{VOC}$  = Monthly throughput of VOC contained in fountain solution (tons)
- $BW_{VOC}$  = Monthly throughput of VOC contained in blanket wash or cleaning solvent (tons)
- $i$  = Each ink, fountain solution, or blanket wash

For the purposes of calculating VOC emissions, the permit requires a tiered approach to determining VOC content in coating. Under certain circumstances, the permit allows the VOC content of coating as supplied used in emission calculations to be based on manufacturer formulation data as shown on the MSDS for each product. If a range of VOC content values is given, calculations shall be based on the maximum value. However, once the monthly calculation of actual emissions indicates that annual VOC emissions from any individual ink, fountain solution, coating, or other material are equal to or greater than 10% of the allowable annual emissions, quarterly testing of that product formulation is required. The testing shall be conducted, by either the permittee or the supplier, using EPA Reference Method 24 (40 CFR 60, Appendix A). Each shipment of subject material must be identified by a product formulation number that may be correlated to Reference Method 24 results. Emission calculations must be based on the most recent test results for each formulation. The quarterly tests may be discontinued after actual annual emissions from individual subject inks, fountain solutions, coatings, or other materials, are below 10% of the allowable levels for three consecutive months. If quarterly testing is discontinued, the permit requires that the VOC content determined in the latest test for each subject formulation be used in lieu of MSDS information.

Please note that RRD's Harrisonburg plant prints books using primarily one of two black inks. The two inks account for over 85% of the ink volume used at the facility. There are many individual colored inks used to fulfill various applications; most are used in very small amounts as needed for illustration or highlighting purposes and represent only a small fraction of the total ink used. Testing inks used in such small quantities (often less than 100 gallons a year) would be costly and would not be representative of the inks comprising the majority of the emissions. The tiered approach proposed, therefore, will ensure that VOC content is verified for those inks that appreciably contribute to emissions and will thus provide a reasonable assurance of compliance with the emission limit.

## **Testing**

The permit does not require source tests. A table of test methods has been included in the permit if testing is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

## **Reporting**

There are no specific reporting requirements related to the sheetfed press.

## **WEB PRESS APPLICABLE REQUIREMENTS – Units 762-773, 783-787, and 790**

### **Limitations**

The following VOC limitations, applicable to the web (heatset) presses, are State BACT requirements from the minor NSR permit issued February 15, 2005 and amended August 11, 2005. Condition numbers are from the minor NSR permit; a copy of the permit is attached as Attachment B.

- Condition 3, requiring that VOC emissions be controlled by using a fountain solution containing alcohol substitutes and limiting the VOC content of the fountain solution to no more than a daily average of five percent by weight
- Condition 4, limiting VOC content of inks used on Presses 762-766, 770-773, 784-787 and 790 to 32% by weight, calculated as a monthly average
- Condition 5, limiting VOC content of inks used on Presses 767-769 and 783 to 28% by weight, as applied
- Condition 6, limiting the VOC composite partial vapor pressure of organic cleaning solvents to 10 mmHg at 20 °C and requiring that organic cleaning solvents, including those retained in used towels, be stored in a closed container when not in use
- Condition 9, limiting fuels used in the heatset press dryers to natural gas and propane
- Condition 10, limiting the annual throughput of VOC in inks, fountain solutions, blanket washes and cleaning solvents used the heatset presses (some presses limited individually and some in groupings)
- Condition 12, limiting annual VOC emissions from the heatset presses (some presses limited individually and some in groupings)
- Condition 14, limiting visible emissions from heatset presses to ten percent opacity

At the time of issuance of the original Title V permit (dated March 15, 2001), most of the heatset presses were subject to a minor NSR permit dated May 3, 1979. On February 15, 2005, all presses were combined under a single minor NSR permit.

## Monitoring and Recordkeeping

The permit requires RRD to inspect each web press stack weekly for visible emissions. If any visible emissions are present, a six-minute visible emissions evaluation (VEE) must be conducted according to EPA Reference Method 9 (40 CFR 60, Appendix A). If during the six minutes any violations of the opacity standard are noted, a one-hour VEE is required to demonstrate compliance with the standard. Timely corrective action is required if a violation is determined to have occurred. Such requirements provide a reasonable assurance of compliance with the visible emissions limit. Please note that based on past inspection reports, it is unlikely that the visible emissions limit will be violated.

The monitoring and recordkeeping requirements in Condition 17 of the minor NSR permit have been modified to meet Part 70 requirements. The permittee is required to monitor and record on a monthly basis the throughput of VOC (in inks, fountain solutions, and cleaning solvents) to the heatset presses and the monthly average or as applied VOC contents of the inks, as applicable. The permit also requires that monthly and annual VOC emissions from the heatset presses be calculated each month to demonstrate compliance with VOC emissions limits. Material Safety Data Sheets (MSDS) for all materials used are required to be maintained on site. The following assumptions, from EPA's draft Control Techniques Guidelines (CTG) for Control of VOC from Offset Lithographic Printing (EPA-453/D-95-001, September 1993) shall be used in calculating VOC emissions:

- 20% of ink VOC is retained in paper substrate (80% emitted)
- 100% of fountain solution VOC is emitted
- 50% of cleaning solvent applied is emitted (50% retained in used towels kept in closed containers)

The permit includes requirements to maintain records of all monitoring and testing required by the permit, derived from Condition 17 of the minor NSR permit. Such records include VOC emission calculations and supporting VOC throughput and material formulation records. Condition III.C.2 requires that the monthly calculation of VOC emissions be made using the following formula:

$$E_{VOC} = \sum_{i=1}^n [(I_{VOC,i} \times 0.80) + FS_{VOC,i} + (BW_{VOC,i} \times 0.50)]$$

Where

- $E_{VOC}$  = VOC emissions in tons per month  
 $I_{VOC}$  = Monthly throughput of VOC contained in ink, as applied (tons)  
 $FS_{VOC}$  = Monthly throughput of VOC contained in fountain solution (tons)  
 $BW_{VOC}$  = Monthly throughput of VOC contained in blanket wash or cleaning solvent (tons)  
 $i$  = Each ink, fountain solution, or blanket wash

Please note that this formula has changed since the original Title V permit was issued in 2001. The formula now includes calculation of VOC emissions from blanket wash for all heatset presses at the facility.

For the purposes of calculating VOC emissions, the permit requires a tiered approach to determining VOC content in coating. Under certain circumstances, the permit allows the VOC content of coating as supplied used in emission calculations to be based on manufacturer formulation data as shown on the MSDS for each product. If a range of VOC content values is given, calculations shall be based on the maximum value. However, once the monthly calculation of actual emissions indicates that annual VOC emissions from any individual ink, fountain solution, coating, or other material are equal to or greater than 10% of the allowable annual emissions, quarterly testing of that product formulation is required. The testing shall be conducted, by either the permittee or the supplier, using EPA Reference Method 24 (40 CFR 60, Appendix A). Each shipment of subject material must be identified by a product formulation number that may be correlated to Reference Method 24 results. Emission calculations must be based on the most recent test results for each formulation. The quarterly tests may be discontinued after actual annual emissions from individual subject inks, fountain solutions, coatings, or other materials, are below 10% of the allowable levels for three consecutive months. If quarterly testing is discontinued, the permit requires that the VOC content determined in the latest test for each subject formulation be used in lieu of MSDS information.

Please note that RRD's Harrisonburg plant prints books using primarily one of two black inks. The two inks account for over 85% of the ink volume used at the facility. There are many individual colored inks used to fulfill various applications; most are used in very small amounts as needed for illustration or highlighting purposes and represent only a small fraction of the total ink used. Testing inks used in such small quantities (often less than 100 gallons a year) would be costly and would not be representative of the inks comprising the majority of the emissions. The tiered approach proposed, therefore, will ensure that VOC content is verified for those inks that appreciably contribute to emissions and will thus provide a reasonable assurance of compliance with the emission limit.

### **Testing**

The permit does not require source tests. The requirement in Condition 16 of the minor NSR permit that RRD conduct VEE on the heatset presses upon the request of DEQ has been included in the Title V permit. A table of test methods has been included in the permit if testing is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

### **Reporting**

There are no specific reporting requirements related to the heatset presses.

## **PAPER AND DUST HANDLING SYSTEMS APPLICABLE REQUIREMENTS – Pneumatic Trim Scrap (PTS) system and Waste Paper Dust (WPD) system**

### **Limitations**

The following particulate matter (PM) limitations, applicable to the scrap and dust handling systems, are State BACT requirements from the minor NSR permit issued February 15, 2005 and amended August 11, 2005. Condition numbers are from the minor NSR permit; a copy of the permit is attached as Attachment B.

- Condition 7, requiring that PM from the WPD system be controlled by fabric filter
- Condition 11, limiting paper throughput to the PTS to 38,600 tons/yr
- Condition 13, limiting hourly and annual emissions from PTS operations to 15 lbs/hr and 19.3 tons/yr, respectively, and limiting emissions from binding line roughing operations (WPD system) to 0.01 gr/dscf and 2.6 tons/yr
- Condition 14, limiting visible emissions from PTS operations to 20 percent opacity and those from the WPD system to five percent opacity

### **Monitoring and Recordkeeping**

#### PTS

The monitoring and recordkeeping requirements in Condition 17 of the minor NSR permit have been modified to meet Part 70 requirements. The permittee is required to perform weekly inspections of the stacks of the cyclones to assess the presence of visible emissions. If visible emissions are seen from the cyclones, the permit requires that an EPA Reference Method 9 test be performed. If the test indicates a violation, corrective action shall be taken.

The permit requires that RRD show compliance with the annual PTS throughput limit by monitoring and recording the weight of paper trim scraps captured in the cyclones. Based on testing at another RRD facility having similar printing and binding operations, RRD derived an emission factor correlating PM emissions to the amount of paper scraps recovered in the cyclones of the PTS (one pound PM per ton paper scraps baled). Subsequently, reference method 5 testing of a similar unit indicated that the derived emission factor is conservative. The emission factor, along with records of paper scraps captured, will be used to calculate PM emissions from the cyclones. Because the emission factor is one, the formula for calculating monthly PM emissions ( $E_{PM}$ ) provided in the permit is simply the tons of paper scrap ( $S$ ) divided by 2000, or

$$E_{PM} = \frac{S}{2000}$$

The throughput limit was derived based on allowable emissions and the emission factor provided by RRD and confirmed by test results. Therefore, compliance with the throughput limit assures compliance with the emission limit.

The permit requires RRD to keep monthly records of the annual throughput (tons) of paper shavings baled. RRD is also required to keep weekly records of the VE inspections performed on the PTS cyclone stacks.

*WPD (Compliance Assurance Monitoring)*

Each baghouse serving the WPD system has potential pre-control PM emissions above 100 tons/yr. The baghouses are used to meet the PM standard established in the minor NSR permit for the WPD system. Accordingly, each baghouse is subject to Compliance Assurance Monitoring (CAM) at 40 CFR 64.

RRD submitted a CAM Plan dated September 28, 2005 (and supplemental information dated March 6, 2006), proposing the following as indicators of compliance for each baghouse:

1. Differential pressure across the baghouse between 1.5 and 6.0 inches water column
2. The absence of visible emissions from the baghouse exhaust stack
3. Annual internal inspections to confirm structural integrity of the baghouse

The plan includes the rationale for indicator selection and range (differential pressure) and is appended as Attachment C. The proposed CAM Plan is derived from the periodic monitoring that was required for the baghouses in the initial Title V permit; it enhances the original monitoring by specifying the acceptable differential pressure range. Additionally, VRO staff added specific recordkeeping requirements as part of the CAM Plan.

The approved CAM Plan, including indicators to be monitored, indicator measurement methods, and performance criteria in 40 CFR 64.3, have been incorporated by reference into the Title V renewal permit. The Plan also defines what constitutes an excursion for each indicator and the threshold above which the number of excursions would require a Quality Improvement Plan (QIP). The permit also requires that records be kept of the monitoring required by the Plan and requires that reports of excursions, monitor downtime incidents and actions taken to implement a QIP be submitted semi-annually. The permit includes a condition stating RRD's obligation to conduct monitoring specified in the permit's CAM attachment. The differential pressure monitoring, visible emissions checks, and annual inspection requirements included in the permit's CAM plan will provide an assurance of compliance with applicable requirements for each WPD baghouse and therefore satisfy the requirements of 40 CFR 64.



## Testing

The permit does not require source tests. A table of test methods has been included in the permit if testing is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

## Reporting

There are no specific reporting requirements related to the sheetfed press.

## ADHESIVE OPERATIONS APPLICABLE REQUIREMENTS – Unit ADH

### Limitations

The following VOC limitations, applicable to adhesive operations, are State BACT requirements from the minor NSR permit issued February 15, 2005 and amended August 11, 2005. Condition numbers are from the minor NSR permit; a copy of the permit is attached as Attachment B.

- Condition 6, limiting the VOC composite partial vapor pressure of organic cleaning solvents to 10 mmHg at 20 °C and requiring that organic cleaning solvents, including those retained in used towels, be stored in a closed container when not in use
- Condition 10, limiting VOC throughput to 12.5 tons/yr
- Condition 12, limiting VOC emissions to 12.5 tons/yr
- Condition 14, limiting visible emissions to five percent opacity

### Monitoring and Recordkeeping

The monitoring and recordkeeping requirements in Condition 17 of the minor NSR permit have been modified to meet Part 70 requirements. The permittee is required to monitor and record on a monthly basis the throughput of VOC in adhesives applied on the binding lines and calculate monthly and annual VOC emissions to demonstrate compliance with VOC limits. Material Safety Data Sheets (MSDS) for all adhesives used are required to be maintained on site. In calculating VOC emissions, it is assumed that all VOC applied is eventually emitted to the atmosphere. The VOC content of adhesives, as supplied, shall be that indicated on the MSDS for each product.

Emissions from adhesive operations are required to be calculated monthly as follows:

$$E_{VOC} = \sum_{i=1}^n ADH_{VOC,i} + CS_{VOC,i}$$

Where

$E_{VOC}$  = VOC emissions in tons per month  
 $ADH_{VOC}$  = Monthly throughput of VOC contained in adhesives, as applied (tons)  
 $CS_{VOC}$  = Monthly throughput of VOC contained in cleaning solvent (tons)  
i = Each stain or solvent used

The recordkeeping requirements in Condition 17 of the Minor NSR Permit have been modified to meet Part 70 requirements. Required records include amount of VOC used and emitted in adhesive operations, including those in the adhesives themselves and those in cleaning solvents. Certified MSDS showing VOC content of each adhesive used must also be maintained.

### Testing

There are no source test requirements for the process. A table of test methods has been included in the permit if testing is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

### GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110, that apply to all Federal operating permit sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions, including those caused by upsets, within one business day.

### INAPPLICABLE REQUIREMENTS

The following regulations were identified by the permittee as inapplicable:

9 VAC 5 Chapter 40 Article 31 (Rule 4-31), Emission Standards for Paper and Fabric Coating Application Systems: Rule 4-31 applies only to facilities located in VOC control areas. RRD is not located in a VOC control area. Additionally, RRD conducts printing, not coating, operations.

9 VAC 5 Chapter 40 Article 36 (Rule 4-36), Emission Standards for Flexographic Packaging, Rotogravure and Publication Rotogravure Printing Lines: RRD does not operate flexographic or rotogravure printing presses.

9 VAC 5 Chapter 40, Article 53 (Rule 4-53), Emission Standards for Lithographic Printing Processes: Rule 4-53 applies only to facilities located in designated VOC control areas. RRD is not located in a VOC control area.

40 CFR 63 Subpart KK (National Emission Standards for Hazardous Air Pollutants from the Printing and Publishing Industry): Subpart KK applies to flexographic and rotogravure presses; lithographic printing presses were excluded from the definition of affected source under the rule. Therefore, RRD's Harrisonburg facility is not subject to the standard.

40 CFR 63 Subpart JJJJ (National Emission Standards for Hazardous Air Pollutants from Paper and Other Web Coating): Subpart JJJJ specifically excludes lithographic web coating from the rule at 40 CFR 63.3300(c). Therefore, RRD's Harrisonburg facility is not subject to the standard.

RRD also identified as inapplicable the recently-promulgated Boiler MACT (40 CFR 63 Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters). However, RRD's boilers are included in the definition of affected source in the Boiler MACT. Based on the age, size, and fuel used, RRD's boilers are considered existing small gas-fired boilers under the rule and therefore part of the affected source definition. Yet, the final rule specifically excludes existing small boilers (using any fuel) from any requirements under the MACT, including notification, recordkeeping, and reporting requirements. VRO does not agree that the Boiler MACT does not apply to RRD, but does find that there are no requirements applicable to RRD deriving from the rule.

Additionally, VRO finds the following regulations to be inapplicable to RRD:

40 CFR 60 Subpart Kb, New Source Performance Standards for Volatile Organic Liquid Storage Vessels: The minimum tank capacity to which 40 CFR 60 Subpart Kb is applicable is 19,812.9 gallons. All storage tanks at the RRD facility have capacities lower than the threshold.

40 CFR 63 Subpart EEEE (National Emission Standards for HAPs from Organic Liquids Distribution): Subpart EEEE has a storage tank applicability threshold of 5,000 gallons. The RRD facility has no tanks that exceed the applicability threshold. Furthermore, transfer operation standards apply to facilities that transfer organic liquids out of the facility; RRD does not transfer solvents out of the facility.

## **INSIGNIFICANT EMISSION UNITS**

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Insignificant emission units include the following:

*Table 4. Insignificant emission units*

<b>Emission Unit No.</b>	<b>Emission Unit Description</b>	<b>Citation</b>	<b>Pollutant(s) Emitted (5-80-720B)</b>	<b>Rated Capacity (5-80-720C)</b>
ADH-TKS	Water-based adhesive tanks	9 VAC 5-80-720B	VOC	-
BAT	Battery chargers	9 VAC 5-80-720B	PM, acid vapors	-
BH	Binder heaters (combustion)	9 VAC 5-80-720C	-	0.1 MMBtu/hr
CHL	Water chillers	9 VAC 5-80-720B	CFC	-
FP	Fire pump (combustion)	9 VAC 5-80-720C	-	1.6 MMBtu/hr
GEN	Emergency generators (combustion)	9 VAC 5-80-720C	-	1.5 MMBtu/hr
DEV	Plate & film developers	9 VAC 5-80-720B	VOC	-
FLM	Manual film cleaning	9 VAC 5-80-720B	VOC	-
HWB	Hot water boilers (combustion for space heat)	9 VAC 5-80-720C	-	6.7 MMBtu/hr
IJP	Ink jet printers	9 VAC 5-80-720B	VOC	-
PV	Propane vaporizer (combustion)	9 VAC 5-80-720C	-	< 10 MMBtu/hr
PW	Parts washers	9 VAC 5-80-720B	VOC	-
PST	Propane storage tanks	9 VAC 5-80-720B	VOC	-
SB	Steam boilers (combustion)	9 VAC 5-80-720C	-	2.2 MMBtu/hr
UST	Underground storage tanks	9 VAC 5-80-720B	VOC	-
WH	Water heaters (combustion)	9 VAC 5-80-720C	-	0.8 MMBtu/hr
WST	Waste storage tank	9 VAC 5-80-720C	-	3,000 gallons

<sup>1</sup>The citation criteria for insignificant activities are as follows:

9 VAC 5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application

9 VAC 5-80-720 B - Insignificant due to emission levels

9 VAC 5-80-720 C - Insignificant due to size or production rate

Please note that the hot water boilers (HWB) are considered part of the affected source under the Boiler MACT (40 CFR 63 Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants from Industrial, Commercial, and Institutional Boilers and Process Heaters). However, because of the installation date and size of the units, the hot water boilers are

considered existing small boilers, and the final Boiler MACT rule specifically excludes existing small boilers (using any fuel) from any requirements under the MACT, including notification, recordkeeping, and reporting requirements. Thus there are no applicable requirements for the hot water boilers derived from the Boiler MACT.

## **CONFIDENTIAL INFORMATION**

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

## **PUBLIC PARTICIPATION**

The draft permit was placed on public notice in the Harrisonburg Daily News Record on December 30, 2005. The public comment period ended 30 days later on January 29, 2006. The draft and supporting documentation were available for public review during the public comment period. No comments were received from the public.

EPA Region III was provided a copy of the proposed permit on December 30, 2005, and its 45-day review period ended February 13, 2006. No comment was received from EPA Region III.

## **ATTACHMENTS**

- A: 2004 annual emissions report
- B: Minor NSR permit dated February 15, 2005 and amended August 11, 2005
- C: CAM Plan submitted by RRD